

obovatus, **Scaevola globulifera*, **S. nitida*, **S. spinescens*, **Sida corrugata*, *Solanum diversiflorum*, *S. lasiophyllum*, *Stylobasium spathulatum*, *Trichodesma zeylanicum*, *Waltheria indica*.

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REFERENCES

- COMMON, I.F.B. and WATERHOUSE, D.F. 1981. *Butterflies of Australia*, 2nd ed. Angus & Robertson, Australia.
- MONTAGUE, P.D. 1914. A report on the fauna of the Monte Bello Islands. *Proc. Zool. Soc. Lond.* 1914 (3) : 625-675.
- SIBATANI, A. and GRUND, R.B. 1978. A revision of the *Theclinessthes onycha* complex (Lepidoptera: Lycaenidae). *Trans. Lepid. Soc. Japan* 29 (1) : 1-34, 158 figs.

Island	No. of species	Approx. sq. km Area
Barrow	14	233
Hermite	10	8.9
Trimouille	11	4.6
Middle	5	3.5
Boodie	7	2.0
Lowendal (S)	3	0.3
Lowendal (N)	6	1.1
S. Double	6	0.16
N. Double	4	0.20
Mushroom	1	few hectares
Long	2	?

Table 2. Size and diversity/no. of species (see text for discussion)

FROM FIELD AND STUDY

Notes on the Swamp Parrot - At 1000 hrs, on 26 February 1983, on the Drummond Track 8.1 km south of the Old Ongerup Road, in vacant Crown Land north of the Fitzgerald River National Park, a single Swamp Parrot *Pezoporus wallicus* was observed feeding on *Daviesia pachyphylla*. This plant has thick and almost cylindrical, sclerophyllous leaves. Feeding was restricted to regrowth where widening of the track had occurred 18-24 months previously. Regrowth was absent from nearby mature vegetation. A large amount of chewed leaves indicated that the bird had spent some time feeding on the plant. Several *D. pachyphylla* plants within 30 m of the bird had been chewed in the same manner. This appears to be the first feeding record for the Swamp Parrot in Western Australia. Frith (1977, *The Readers Digest Complete Book of Australian Birds*) notes that in south-eastern Australia the bird's food consists of "seeds of grasses and herbaceous plants, and vegetable matter, particularly green shoots".

The Swamp Parrot has been rarely recorded in Western Australia. Most of the sightings during the last 20 years have occurred in vacant Crown Land north of the Fitzgerald River National Park, between Susetta and West Rivers (Newbey, 1982, "Land Use Planning of the North Fitzgerald Area: Initial Ecological Survey". Private report.). The habitat of low heathland, with or without scattered mallees, differs markedly from that of other sightings in coastal

sedgeland. In the Eastern States and Tasmania, the bird has also been recorded in both temperate and sub-tropical graminoid heathlands (Meredith, 1983, RAOU Newsletter 55 : 6-11).

Our sighting was in low heathland on well-drained upland near the Stirling Fault. The area has an annual average rainfall of 400 mm and is located 30 km from the sea. The vegetation was 50-60 cm high with a shrub canopy cover of 35-40% consisting largely of *Hakea falcata* with some *Allocasuarina campestris* ssp. *campestris*. Underlying sedges were 10-15 cm high with a canopy cover of 10-15% and dominated by *Mesomelaena stygia*.

—KEN and BRENDA NEWBEY (Ongerup) and
KEITH BRADBY (Ravensthorpe)

Quokka, *Setonix brachyurus*, at Green Range — The pre-settlement range of the Quokka extend east to Esperance. It has diminished on the mainland since clearing and reports are now a rare occurrence.

In January 1983 while at Green Range (60 km north-east of Albany) I was informed of the presence of Quokkas there. Farmers were aware of their presence and had recently sighted animals fleeing from burning bushland. One farmer keeps a pet Quokka. Although I did not see any live animals, I located a skeleton which was identified by the Museum.

According to Kitchener & Vicker 1981 (*Catalogue of Modern Mammals in the Western Australian Museum 1895 to 1981*) the Museum has received specimens in the last 20 years from Two Peoples Bay and Ellen Peak which are respectively 40 km southwest and 30 km north of Green Range.

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A record of late breeding by Blue-billed Duck *Oxyura australis*. — On 5 March 1982, at about 1830 hours, a female Blue-billed Duck with 6 downy ducklings (approx. one week old) were observed at the Bayswater Bird Sanctuary (31°55'S, 115°55'E), near the Swan River. The Sanctuary is a small permanent swamp (approx. 4 ha.), situated 7 kilometres NNE of Perth, which is artificially maintained over summer, and floods to a maximum depth of about 1.5 metres in winter.

As the presence of downy ducklings in early March can be considered highly unusual, it might be considered desirable to reconstruct the preceding events. Judging by their size and appearance, the first ducklings would almost certainly have hatched between 27 February and 1 March. The period of incubation for this species is between 26 and 28 days (Wheeler, *Emu*, 60, 281-4, 1960), so final egg-laying must have taken place between 1 and 4 February. If the female laid an egg each morning until the clutch was complete, at least 6 days must have elapsed between the laying of the first and last egg. Egg-laying would have therefore commenced between about 27 and 30 January. In Blue-billed Duck clutches are normally from 5 to 8 in number (Serventy and Whittell, *Birds of Western Australia*, 1976), thus in the case of these 6 ducklings the possibility of early mortality or infertility of some eggs may be ignored. Occasionally, Blue-billed Duck occupy the deserted nest of a Coot (*Fulica atra*) or other waterbird (Frith, *Waterfowl in Australia*, 1967). Assuming a ready made nest was available, and allowing one day for courtship activities, then 26 January is the earliest date before which stimulation to breeding may have occurred.

In a regular winter rainfall area, such as the Perth region, clutches are usually complete by November (Frith, 1967). Records from areas with erratic or uniform rainfall, such as inland and south-east Australia, indicate that eggs have been found between September and February (Frith, *ibid* 1967; Wheeler, *Emu*, 53, 280-2, 1953). However, following heavy rainfall in February 1955, Serventy and Marshall (*Emu*, 57, 99-126, 1957) recorded in the Perth area a female Blue-billed Duck with two small ducklings on 8 May. Similarly, between 20 and 22 January 1982, Perth received 115 mm, its highest January rainfall on record. Following these rains, Mr E. Singleton observed that all species of waterfowl left the Bayswater swamp, the only exception being Blue-billed Duck, which were present in larger numbers than usual for the time of year.

Although Blue-billed Duck have a regular spring breeding season in the Perth region, this observation raises the interesting possibility that they may respond to extraordinary climatic events and breed at an unusual time.